What is claimed is:

(9) CLAIMS

1. A method for identifying an unknown print medium, the method comprising:

recording data representative of medium thickness and transmissivity using an incident light source; and

comparing recorded data from said recording to predetermined data representative of known print medium thickness and transmissivity.

2. The method as set forth in claim 1 wherein said recording comprises:

recording transmissive light levels of the print medium over a lightwave reflective element, and

recording transmissive light levels of the print medium over a lightwave absorptive element.

3. The method as set forth in claim 1 further comprising:

when no match between said recorded data and said predetermined data is obtained, storing said recorded data as a new print medium data file.

4. The method as set forth in claim 1 embodied in computer code.

5. A method for characterizing print media comprising:

beaming transmissive light through a first type of print medium;

impinging the light onto surface reflective of the light and a surface absorptive of the light;

recording a profile representative of light reflection and light absorption; and

storing said profile in a memory with an identifier associated with said first type of print medium.

6. The method as set forth in claim 5 further comprising:

beaming (radiating) transmissive light through a second type of print medium;

impinging the light onto surface reflective of the light and a surface absorptive of the light;

recording a profile representative of light reflection and light absorption; and

storing said profile in a memory with an identifier associated with said second type of print medium.

7. The method as set forth in claim 6 wherein said memory is used as a look-up table for identifying.

8. A method for determining a multi-pick feed of cut sheet print media, the method comprising:

storing first data representative of media thickness and transmissivity of a single sheet of a known print medium;

storing second data representative of media thickness and transmissivity of at least two stacked sheets of a known print medium;

recording third data representative of current medium thickness and transmissivity during transport of said current medium from a supply toward a printing zone; and

comparing said third data to said first and second data.

9. A print media sensor device, comprising:

mounted for bracketing a print media transport path, emitter - receptor means for directing a light beam across the transport path, the light beam having predetermined intensity and wavelength for penetrating print media; and

aligned with the emitter means such that said light beam is received after passing through a sheet of print media in said path, an associated light absorbing means and an associated light reflecting means for receiving the light beam,

wherein the receptor means provides an output signal indicative of thickness and transmissivity of the sheet.

10. The device as set forth in claim 9 wherein said output signal is a first level when no paper is interrupting the beam, a second output signal indicative of a single sheet of print media interrupting the beam, and at least one other signal level indicative of multiple sheets of print media interrupting the beam.

11. The device as set forth in claim 9 wherein said output signal is a first signal when no paper is interrupting the beam, a second signal when the sheet of paper is interrupting the beam over a reflective surface, and a third signal when the sheet of paper is interrupting the beam over an absorptive surface.

12. The device as set forth in claim 11, comprising:

mounting means for scanning said beam across a paper transport path of said paper wherein a reflective element and absorptive element are mounted transverse to said transport path such that the sheet of paper passes between said mounting means and said reflective element and absorptive element.

13. The device as set forth in claim 12, comprising:

the emitter means is an LED optical emitter mounted for projecting a light beam through the paper wherein the light beam has a predetermined intensity and wavelength for penetrating and being reflected back through at least two sheets of print media.

14. A computer memory comprising:

computer code for recording data representative of print medium thickness and transmissivity using an incident light source; and

computer code for comparing recorded data from said recording to predetermined data representative of known print medium thickness and transmissivity.